

CLIMATOLOGICAL DATA FOR JUNE, 1912.

DISTRICT No. 9, COLORADO VALLEY.

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GENERAL SUMMARY.

For the most part the barometric pressure was low and stagnant during the month. The usual summer thunderstorms attended this condition during the latter part of the first decade, and during the second and third decades they were of frequent occurrence. The precipitation was greater than the June average over most of the district, and a notable feature was the moderately heavy snowfall in the eastern part of the Colorado area about the middle of the month. High winds and sandstorms occurred on various dates in localities in Arizona and New Mexico. Flood conditions obtained in the Colorado and its northern tributaries during the first half of the month. Considerable damage resulted along the Grand and its most important tributary, the Gunnison. Along the Colorado River, between Fort Mojave, Ariz., and Palo Verde, Cal., much damage was done. Warm weather prevailed during the first six days of the month; after the 7th the mean temperature averaged below the normal. At the more elevated stations in Arizona, in localities in northern and central New Mexico, Utah, except the southern portion; Wyoming; and Colorado, except the valley regions, frost or freezing temperature occurred on various dates, more especially between the 16th and 19th, but the damage was immaterial.

TEMPERATURE.

The mean of the 142 stations reporting was 67.9°, or 0.4° below the normal. The mean for June, 1911, was 69.1°. The highest monthly mean was 95.4° at Aztec, Ariz., while the lowest was 38.0° at Corona, Colo. Except in Wyoming and Arizona, the monthly means were below the normal. The small deficiency in the monthly mean temperature for the district as a whole was due chiefly to the warm weather that prevailed during the first week of the month. From the 7th to the close of the month, except in Wyoming, mean temperatures averaged below the normal. In the Colorado area the low temperatures were unusually pronounced from the 15th to the 19th, inclusive. In Wyoming the highest temperatures occurred during the last decade; in the remainder of the district the weather was warmest between the 3d and the 6th. Over most of the Colorado Basin the lowest temperatures obtained between the 15th and 19th.

Details of temperature are summarized in the following table:

Areas of States in District No. 9.	Temperature.					Station.	Station.
	Mean.	Departure from normal.	Highest.	Lowest.	Station.		
Western Wyoming...	54.8	+2.3	90	20	Green River..	Willow Creek Cabin.	
Western Colorado.....	56.5	+2.0	97	15	Delta.....	Chromo.	
Eastern Utah.....	65.5	-0.4	104	18	Springdale...	Strawberry Tunnel (east) and Scofield.	
Western New Mexico.	67.8	-1.0	104	27	At 4 stations.	Berger's Ranch.	
Arizona.....	76.5	+0.4	120	23	Gilabend.....	Flagstaff No. 1.	
Southeastern Nevada.	73.4	.....	112	38	Logan.....	Caliente.

PRECIPITATION.

The average for the 193 stations reporting was 0.93 inch, or 0.27 inch above the normal. The average for June, 1911, was 1.04 inches. There was a deficiency in the Wyoming and the Utah areas, but on all the drainage basins the averages were above the normal. The precipitation was largely in the form of thundershowers. In the Colorado area, however, snow fell near the Continental Divide from the 15th to the 17th, principally on the 17th. But little rain fell during the first week of the month. In Wyoming and Colorado frequent showers occurred after the 7th. In Utah, New Mexico, and Arizona the precipitation was confined chiefly to the 7th and 8th and the last decade. The greatest monthly amount was 5.66 inches at Redeliff, Colo., while none occurred at 1 station each in Utah and New Mexico, and at 5 in Arizona.

The average number of days with 0.01 inch or more precipitation was 5 in western Wyoming; 9 in western Colorado; 4 in eastern Utah; 5 in western New Mexico; 3 in Arizona; and 1 in southeastern Nevada. For the district as a whole the average was 5 days.

The average precipitation and departures from the normal on the different watersheds are given in the following table:

Watershed.													
Green.		Grand.		San Juan.		Little Colorado.		Gila.		Mimbres.		Colorado proper.	
Average.	Departure.	Average.	Departure.	Average.	Departure.	Average.	Departure.	Average.	Departure.	Average.	Departure.	Average.	Departure.
0.95	+0.06	1.75	+0.68	1.39	+0.30	0.64	+0.14	0.50	+0.22	1.39	+0.28	0.34	+0.14

MISCELLANEOUS.

There was less than the normal sunshine. At Grand Junction it was 73; Durango, 76; Phoenix, 92; and Yuma, 94 per cent of the possible.

The relative humidity was above the normal for the district. The following are the values: Grand Junction, 36; Durango, 52; Phoenix, 28; and Yuma, 40 per cent.

FLOOD IN THE COLORADO.

F. H. BRANDENBURG.

Remarkably high stages prevailed for a short time in June in several of the important tributaries of the Colorado River, and for a somewhat longer period in the trunk stream. This large volume came from the melting of snow, for the most part in the upper reaches of the streams rising in Colorado. The volume contributed by the Green from the more northerly area in Wyoming was relatively small and, fortunately, came after the crest had passed in the more southerly tributaries. The Gunnison, which had reached a very high stage during the warm spell in

TABLE 1.—Climatological data for June, 1912. District No. 9, Colorado Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of part-ly cloudy days.		
Wyoming.																			
Battle Mountain	Carbon	7,300	13	52.8	+ 2.3	81	28	26	15	44	0.30	- 0.74	0.15	T.	0	14	15	1	U. S. Forest Service.
Daniel	Uinta	6,740	13	56.9		83	24	27	16	46	0.84		0.30	T.	0	11	12	7	J. M. Vandervoort.
Eden	Sweetwater	6,577	16	59.7		90	24	25	16	45	0.27		0.10	0	5	7	16	7	Eden Valley L. & I. Co.
Green River	do	6,083	6	54.2		83	21	25	15	50	0.16		0.12	0	4	15	13	0	Geo. H. Maxom.
Pinedale	Fremont	7,197	1																U. S. Forest Service.
Rambler	Carbon	9,232	1																Do.
Willow Creek Cabin	Fremont	7,500	3	56.6		76	21	20	15	41					11	5	5		Do.
Big Piney	Uinta																		Ira Dodge.
Colorado.																			
Ashcroft	Pitkin	9,483	10	49.2	- 2.2	76	5	23	18	43	2.77	+ 1.38	1.30	13.0	16				Dan McArthur.
Breckenridge	Summit	9,536	23	46.1	- 2.2	70	6	24	19	41	1.54	+ 0.48	0.53	T.	7	2	14	14	Mrs. J. G. Thompson.
Buford	Rio Blanca		1								1.54		0.34	0	10	14	11	5	Mrs. H. Genier.
Cascade	San Juan	8,900	5								4.11		0.80	0	15	11	7	12	San Juan W. & P. Co.
Cedaredge	Delta	6,175	14	62.4	- 2.3	86	6	35	16	39	0.46	- 0.05	0.18	0	4	14	15	1	Harry A. Cobbett.
Chromo	Archuleta	7,500	6	54.8		86	4	15	3	70	1.37		0.60	0	8	16	4	10	Lawrence Nolan.
Cochetopa	Saguache	9,088	3								1.32		0.25	2.0	9	4	9	17	Bessie McDonough.
Collbran	Mesa	6,000	19	60.6	- 2.0	85	6	35	16	37	0.98	+ 0.32	0.25	0	13	14	14	2	A. A. Wood.
Columbine	Routt	8,766	3								1.05		0.30	0	6	14	13	3	Mrs. M. A. Caron.
Columbine Ranch	Delta	6,925	3								1.35		0.45	T.	5	8	15	7	George W. Wade.
Corona	Grand	11,660	3								2.90		0.80	18.0	5				U. S. Weather Bureau.
Craig	Moffat																		Joseph F. Haurbrich.
Crawford (near)	Montrose	6,600	1								3.4		0.53	T.	14	15	12	3	C. W. Roe.
Crested Butte	Gunnison	8,867	3								2.06		0.80	10.0	10	7	12	11	Charles L. Ross.
De Beque	Mesa	4,935	14	48.4		74	5	20	18	46	2.06		0.79	0	10	6	11	5	H. M. Quigley.
Delta	Delta	4,965	22	67.4	- 2.3	94	6	36	17	48		- 0.06	0.10	0	5	15	12	3	E. M. Getts.
Dillon	Summit	8,800	17	65.6	- 2.3	97	6	34	18	51	0.26		0.79	T.	6	11	9	10	Harry T. Hamilton.
Durango	La Plata	6,534	17	60.6	- 2.1	87	4	36	18	44	0.89	+ 0.11	0.26	0	10	9	20	1	U. S. Weather Bureau.
Eureka	San Juan	10,000	3								1.34		0.40	4.0	6	12	0	18	San Juan W. & P. Co.
Fraser	Grand	8,560	3								1.58		0.40	0.5	8	3	9	18	L. D. C. Gaskill.
Fruita	Mesa	4,510	13	67.0	- 1.6	95	6	35	16	51	0.20	- 0.11	0.19	0	2	14	14	2	J. B. Willsea.
Glade Park	do	7,000	1								0.28		0.13	0	4				A. F. Terrill.
Gladstone	San Juan	10,400	1																San Juan W. & P. Co.
Glenwood Sp'gs (near)	Garfield	5,823	14	58.4	- 3.1	84	3	32	1	48	0.60	- 0.08	0.30	0	2	24	5	1	E. A. O'Neil.
Grand Junction	Mesa	4,608	21	69.6	- 3.0	94	6	43	16	39	1.37	+ 0.97	1.13	0	9	12	11	7	U. S. Weather Bureau.
Grandlake	Grand	8,155	4								3.30		1.20	2.0	9	11	13	6	Mrs. Belle Kaufman.
Grand Valley	Garfield	5,089	20	63.8	- 2.4	93	5	32	18	55	0.81	+ 0.22	0.23	0	9	9	11	10	David Evans.
Gunnison	Gunnison	7,670	19																Clarence Adams.
Hesperus (near)	La Plata	7,610	1								1.51		0.60	0	8	9	10	11	G. F. Snyder.
Horsefly	Montrose	8,700	2								1.86		0.48	0.5	8	14	14	2	Lawrence J. Finch.
Ironton	Ouray	10,000	1								2.25		0.39	4.4	11	8	11	11	Mrs. Amanda E. Foley.
Lake City	Hinsdale	8,686	18	53.0	- 2.2	77	6	26	16	41	2.69		0.66	4.5	16	8	9	13	J. F. Maurer.
Lay	Moffat	6,190	13	57.2	- 0.3	83	24	25	18	51	1.24	+ 0.61	0.66	0	8	11	7	12	A. G. Wallihan.
Mancos	Montezuma	6,960	13	60.0		86	3	29	18	46	1.46	+ 0.58	0.81	0	6	12	17	1	B. M. Krumpanitzky.
Marble	Gunnison	7,951	3	52.9		80	5	25	18	43	2.56		0.67	3.0	10	19	7	4	F. E. Morse.
Marshall Pass	Saguache	10,846	9								3.32		0.72	S.0	11	13	5	12	Wm. L. Williams.
Meeker (near)	Rio Blanca	6,182	20	56.6	- 2.8	81	5	28	18	49	2.01	+ 0.98	0.65	0	12	13	12	5	T. Baker.
Montrose	Montrose	5,811	23	64.8	+ 1.0	91	4	34	16	42	1.31	+ 0.99	0.32	0	9	11	16	3	U. S. Reclamation Service.
Nast	Pitkin	7,953	2	50.0		76	5	28	18	45	1.75		0.70	12.0	7	12	11	7	Arthur Hanthorn.
Pagoda	Routt	6,500	21																Mrs. J. W. Scott.
Pagosa Springs	Archuleta	7,108	1								1.46		0.47	0	8	10	17	3	E. T. Walker.
Paonia	Delta	5,694	17	63.8	- 3.1	90	5	24	18	41	0.80	- 0.39	0.42	0	3	12	17	1	J. M. Underwood.
Pitkin	Gunnison	9,500	3								1.80		1.12	S.0	8	12	10	8	Mrs. Maggie Cammann.
Pyramid	Rio Blanca	1	1	53.0		79	5	27	18	45	1.84		0.43	T.	9	7	20	3	E. E. Egry.
Rangely	do	5,050	13	62.6	- 1.0	95	6	34	2	54	0.70	+ 0.17	0.40	0	3	14	8	8	J. H. McGuire.
Redcliff	Eagle	8,695	19								5.66	+ 4.55	1.30	16.3	14	10	11	9	Dorothea Greiner.
Redvale	Montrose										0.98		0.37	0	5				E. S. C. Foster.
Rico	Dolores	8,824	10																Clinton B. Smith.
Rifle	Garfield	5,437	6	64.1		90	3	35	18	46	0.48		0.14	0	6	13	14	3	Hermann Eiche.
River Portal	Montrose	6,570	6	60.6		87	3	33	18	45	2.29		0.48	0	10	12	10	7	U. S. Reclamation Service.
Sapinero (near)	Gunnison	8,125	9	51.2		75	6	25	15	41	2.40		0.92	6.5	16	14	9	7	W. F. Irving.
Shoshone	Garfield	6,110	9																Central Colorado P. Co.
Silverton (near)	San Juan	9,400	5	47.5		72	3	21	28	47	4.22		0.80	7.5	12	9	9	12	San Juan W. & P. Co.
Spruce Lodge	Grand	9,600	4								4.22		0.80	10.0	18	6	18	6	H. J. Willis.
Steamboat Springs	Routt	6,683	9	52.8		80	5	23	21	51	2.66		0.58	0	9	18	8	4	Herbert B. Gee.
Tacoma	La Plata	7,300	5								1.84		0.45	0	10	5	12	13	San Juan W. & P. Co.
Telluride	San Miguel	8,756	1	51.0		77	3	25	16	48	2.52		0.54	4.6	17	12	9	9	Wm. T. March.
Terminal Dam	La Plata	8,300	5								2.02		0.29	0	12	16	5	9	San Juan W. & P. Co.
Uncompahgre Plateau	Montrose	8,400	2								0.86		0.30	0	4	9	21	0	Martin Esser.
Yampa (near)	Routt	8,000	3								1.99		0.53	0	11	8	7	5	Percy A. Hughes.
Utah.																			
Aneth	San Juan	4,800	8	73.8		96	4	46	1	44	0.02		0.02	0	1	24	4	2	H. R. Antes.
Bluff	do			76.1		97	5	55	2	37	0.02		0.02	0	1	13	6	1	Mrs. H. P. Raplee.
Boneta	Wasatch										0.35		0.16	0	6	16	4	10	Oscar Wilkins.
Castle Dale	Emery	5,500	13	64.6	+ 1.1	88	4	33	17	43	0.20	- 0.35	0.10	0	3	23	7	0	James Jeffs.
Cisco	Grand	4,447	12																J. J. Anderson.
Desert Lake	Emery																		H. G. Mills.
Dragon	Uinta			63.4		91	6	34	17	45	1.55		0.51	0	11				

TABLE 1.—Climatological data for June, 1912. District No. 9—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.				Sky.				Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelting.	Number of rainy days, 0.01 inch or more.	Number of clear days.		Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.
<i>Utah—Continued.</i>																			
Loa	Wayne	7,000	18														W. S. McClellan.		
Manila	Uinta	6,225															Daniel M. Nelson.		
Moab	Grand	4,000	22	71.8	- 0.3	101	6	39	17	49	0.83	+ 0.58	0.18	0	7	8	20	2	Henry Crouse.
Monticello	San Juan	7,545	3	60.6		81	6	35	16	31	1.17		0.40	0	5	8	19	3	Geo. F. Barton.
New Harmony	Washington																		Geo. F. Prince.
Orderville	Kane	6,660									0.31		0.13	0	3				F. A. Porter.
Pine Valley	Washington	6,000																	Mason Gardner.
Price	Carbon	5,557	1	66.2		91	4	33	16	46	1.37		0.85	0	4	22	4	4	R. H. Thompson.
Ranch	Kane	6,700	9	56.8		85	4	30	17	45	0.14		0.14	0	1	16	13	1	J. W. Seaman.
San Rafael	Emery										0.07		0.07	0	1	18	11	1	W. C. Foy.
St. George	Washington	2,880	25	74.4	- 2.1	103	4	47	2	51	0.72	+ 0.65	0.62	0	4	12	13	5	A. B. Ballantyne.
Scotfield	Carbon	7,625	2	52.4		80	6	18	18	55	0.95		0.29	0	8	17	4	9	B. Newren.
Springdale	Washington	3,500	4	83.4		104	4†	55	10	37	0.00		0.00	0	0	19	3	8	Hattie Wood.
Strawberry Tunnel—East	Utah			49.9		76	20	18	16	48	1.22		0.30	0	6	7	9	2	U. S. Reclamation Service.
Sunnyside	Carbon	5,280	7																A. Rader.
Teasdale	Wayne	7,000	2	58.6		83	3†	34	16	39	0.06		0.05	0	2	7	11	12	Henry Cullum.
Thompsons	Grand	5,150	1	69.3		93	6	40	17	36	0.15		0.12	0	3	14	8	0	A. M. Starmont.
Tropic	Garfield	7,000	15	62.6	+ 1.1	90	3	38	30	44	0.21	- 0.20	0.07	0	1	10	13	1	E. P. Bolton.
Troutcreek Ranger	Uinta	9,200									1.87		0.35	0	12	6	15	9	Forest Supervisor.
Vernal	do.	5,050	15	63.3	- 2.6	89	2†	27	16	49	0.03	- 0.33	0.03	0	1	25	5	0	S. P. Trim.
White Rocks	do.										0.48		0.17	0	8	8	5	17	C. F. Keil.
Woodside	Emery	4,645	1	68.0		95	4	36	17	50	0.38		0.30	0	2	12	13	5	D. P. Adams.
<i>New Mexico.</i>																			
Alma	Socorro	5,500	15	69.2	- 0.2	98	3†	41	1†	57	2.59	+ 2.05	1.30	0	7	5	25	0	M. A. Balke.
Aragon	do.		5	62.6		88	4	40	1†	45	2.00		1.15	0	6	13	15	2	John R. Milligan.
Aztec	San Juan	5,590	12								0.56	+ 0.16	0.22	0	6	13	15	2	Dr. T. J. West.
Berger's Ranch	McKinley	8,000		56.6		85	3†	27	18	49	1.38		0.37	0	9	15	11	4	Herman Berger.
Blackrock	do.	6,500	3	65.2		90	4†	39	17	44	0.56		0.30	0	8	8	7	15	D. Blackwater.
Bloomfield	San Juan	5,500	17	67.2	- 0.9	96	5	37	1†	52	0.92	+ 0.47	0.51	0	3	9	20	1	Fred LeClerc.
Cambray	Luna	4,215	15			104	5				1.04	+ 0.42	0.40	0	6	7	13	10	Agent So. Pac. R. R.
Cliff	Grant	4,470	12	76.6	+ 2.4	104	4	53	24		1.20	+ 0.71	1.00	0					W. C. Belden.
Columbus	Luna	4,054	3			104	5				0.10		0.10	0	1	21	3	6	Agent E. P. & S. W. R. R.
Deming	do.	4,333	35	76.2		102	6	45	18	50	0.88	+ 0.28	0.88	0	1	27	2	1	Agent So. Pac. R. R.
Dulce	Rio Arriba	6,756	15											0					F. E. James.
Fort Bayard	Grant	6,152	37	68.8	- 2.3	92	3	49	18	39	1.80	+ 1.01	0.68	0	10	19	6	5	U. S. General Hospital.
Fruitland	San Juan	4,800	18	67.0	- 1.4	92	4	37	18	50	0.32	+ 0.16	0.30	0	2	17	13	0	Cyril J. Collyer.
Gage	Luna	4,486	12	72.6		102	12†	40	2†	53	0.00	- 0.61	0.09	0	0	20	1	9	Agent So. Pac. R. R.
Gila Planting Station	Grant	6,475	1	47.8		92	3†	48	18†	37	1.58		0.66	0	10	15	15	0	U. S. Forest Service.
G. O. S. Ranch	do.	8,000																	Victor Culbertson.
Hachita	do.	4,504	3			104	4†				T.		T.	0	0	24	4	2	Agent E. P. & S. W. R. R.
Haynes	Rio Arriba	6,040	1	61.8		87	4	33	1	51	0.38		0.13	0	5	16	12	2	Dr. John R. Haynes.
Hermans	Luna	4,451	3			100	4†				0.75		0.60	0	2	20	6	4	Agent E. P. & S. W. R. R.
Lordsburg	Grant	4,245	29	75.2	- 3.4	102	4	51	10	46	0.51	+ 0.21	0.22	0	3	2	28	0	Agent So. Pac. R. R.
Luna	Socorro	7,300	7	59.9		87	5†	30	18	51	0.80		0.45	0	4	6	24	0	Charles B. Martin.
Mimbres	Grant	5,007	7								2.15		0.81	0	6	19	11	0	Charles Dennis.
Pines Altos (near)	do.	7,253	1					36	18		1.95		0.52	0	10	13	16	1	O. L. Scott.
Pratt	do.	4,415	3								0.48		0.22	0	3	25	5	0	Agent E. P. & S. W. R. R.
Redrock	do.	4,150	7								0.36		0.15	0	3	16	11	3	Robert H. Woods.
Rodeo	do.	4,118	3											0	13	18	12	0	Agent E. P. & S. W. R. R.
Silver City	do.	5,800	1	69.8		95	4	46	19	44	2.28		0.68	0	13	18	12	0	B. M. Brumback.
<i>Arizona.</i>																			
Allaires Ranch	Cochise	4,184	14								0.31	+ 0.04	0.19	0	3	20	7	3	Thomas Allaire.
Alpine	Apache	8,500		55.0		81	4†	26	18	49	1.60		0.50	0	5	10	8	12	U. S. Forest Service.
Aztec	Yuma	492	13	95.4	+ 5.3	117	6	70	1†	42	0.00	- 0.61	0.00	0	0	30	0	0	Agent So. Pac. Ry.
Benson	Cochise	3,523	31	76.8	- 3.5	106	6	54	1†	48	T.	- 0.32	T.	0	0	13	7	10	Do.
Bisbee	do.	5,500	22	72.6	- 2.4	92	4†	43	9	42	0.53	+ 0.14	0.27	0	5	15	12	3	Rev. J. G. Pritchard.
Blue	Greenlee										1.19		0.40	0	7	29	1	0	Mary A. Jones.
Bowie	Cochise	3,756	35	84.8	+ 5.0	107	4	55	10	45	0.48	- 0.08	0.30	0	2	10	15	2	Agent So. Pac. Ry.
Buckeye	Maricopa	980	20	85.8	+ 5.3	115	5	56	18	53	T.	- 0.01	T.	0	0	29	1	0	H. F. Kell.
Canille	Santa Cruz	5,225	3								0.58		0.40	0	4	7	23	0	Robt. A. Rodgers.
Casa Grande	Pinal	1,396	31								1.00	+ 0.07	1.00	0	1	13	0	17	Agent So. Pac. Ry.
Casa Grande Ruins	do.	1,422	4	85.3		113	5	57	1	49	1.03		0.68	0	4	17	9	4	F. Pinkley.
Cavecreek	Maricopa	1,520	4										0.62	0	3	3	10	17	E. A. Howard.
Chin Lee	Apache	6,090	4	66.6		92	3†	36	1	51	0.71		0.62	0	3	8	9	13	Rev. L. Ostermann, O. F. M.
Chlarsous Mill	Graham	8,000	5	64.2		84	6	49	12†	25	2.37		1.09	0	7	8	9	0	H. R. Charlson.
Clifton	Greenlee	3,584	4	53.2		105	3†	65	3†	40	0.63	+ 0.05	0.32	0	6	17	13	0	Arizona & N. Mex. Ry. Co.
Cline	Gila	2,300	12	77.5	- 0.4	103	4	49	11	48	0.32	+ 0.14	0.28	0	2	20	10	0	W. M. Clanton.
Cochise	Cochise	4,219	14	80.0	+ 1.7	103	26	55	15	43	0.54	+ 0.38	0.54	0	1	27	0	3	Agent So. Pac. Ry.
Columbia	Yavapai	1,900	12	86.5	+ 3.8	111	5	64	9†	35	0.05	- 0.22	0.05	0	1	30	0	0	M. J. Nolan.
Courtland	Cochise	4,543	3								0.37		0.21	0	4	9	21	0	Agent E. P. & S. W. R. R.
Dos Cabezos	do.	5,250	4	72.6		102	3†	44	10†	54	0.13		0.13	0	1	18	10	2	Neil Erickson.
Douglas	do.	3,930	9	75.9		110	5	43	13	55	1.21		0.45	0	5	22	7	1	Dr. F. T. Wright.
Dudleyville	Pinal	2,204	20	77.7	+ 0.9	102	4†	55	10	42	0.62	+ 0.38	0.52	0	2	11	14	5	Geo. F. Cook.
Fairbank	Cochise	3,862	3								0.10		0.10	0	1	8	20	2	Agent E. P. & S. W. R. R.
Flagstaff	Coconino	6,907	14	58.4	- 0.9	85	5	29	17	46	0.40	- 0.15	0.28	0	7	15	11	4	U. S. Weather Bureau.

TABLE 1.—Climatological data for June, 1912. District No. 9—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.					Sky.			Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.			Number of cloudy days.
Arizona—Continued.																				
Intake.....	Gila.....	2,230	6							0.75		0.75	0	1	25	4	1	w.	U. S. Reclamation Service.	
Jerome.....	Yavapai.....	4,743	15	75.7	- 1.0	97	3†	54	17	31	0.39	+ 0.15	0.31	0	2	14	16	0	se.	Dr. L. A. Hawkins.
Keams Canyon.....	Navajo.....	6,600	7	66.0		89	3†	40	18	43	0.34		0.15	0	5	20	10	0	w.	David E. Livesay.
Kingman.....	Mohave.....	3,326	9	77.29		102	3†	45	12	45						24	0	6	s.	Agent A. T. & S. F. Ry.
Lakeside.....	Navajo.....	6,500	7	62.6		90	3	25	11	55	0.77	+ 0.41	0.23	0	5	14	5	11	sw.	Prof. J. Peterson.
Lewis Springs.....	Cochise.....	4,029	3								0.20		0.10	0	3	12	1	17		Agent E. P. & S. W. R. R.
Maricopa.....	Pinal.....	1,186	36	87.9	- 1.5	118	5	55	19	57	0.25	+ 0.18	0.25	0	2	27	3	0	w.	Agent So. Pac. Ry.
McNeal.....	Cochise.....	4,490	12								0.45		0.43	0	2	10	20	0	sw.	Miles McNeal.
Mesa.....	Maricopa.....	1,244	17	83.2	- 0.2	110	4	58	16	45	0.10	- 0.09	0.10	0	1	18	10	2	sw.	C. L. Diehl.
Mohawk Summit.....	Yuma.....	558	12					40	13†		0.00	0.00	0.00	0	0	23	1	0	e.	Agent So. Pac. Ry.
Naco.....	Cochise.....	4,579	23								0.49		0.24	0	6	19	0	17	sw.	Agent E. P. & S. W. R. R.
Natural Bridge.....	Gila.....	4,990	19								0.43	+ 0.16	0.30	0	2	16	11	3	sw.	D. G. Goodfellow.
Oracle.....	Pinal.....	4,500	19																	J. J. Lawson.
Osborn.....	Cochise.....	4,676	3								0.48		0.24	0	3	3	18	9	w.	Agent E. P. & S. W. R. R.
Paradise.....	do.....	5,436	5	67.9		93	6	44	12	42	0.45		0.18	0	3	9	21	0	sw.	J. C. Hancock.
Parker.....	Yuma.....	345	18	87.0	+ 2.1	113	4†	64	13	47	0.50	+ 0.49	0.50	0	1	27	2	1	sw.	M. A. Israel, M. D.
Payson.....	Gila.....	5,550	4																	Mart McDonald.
Phoenix.....	Maricopa.....	1,108	17	86.0	+ 1.6	111	5	64	18	41	0.01	- 0.11	0.01	0	1	24	4	2	e.	U. S. Weather Bureau.
Phoenix (1).....	do.....	1,092	21	84.0	+ 1.2	113	5	56	18	51	0.04	- 0.05	0.04	0	1	22	7	1	w.	Geo. Acuff.
Phoenix (2).....	do.....	1,189	4	85.1		111	5	61	10†	43	0.00		0.00	0	0	21	1	8	sw.	Salt Riv. Val. Nurseries.
Pinal Ranch.....	Pinal.....	4,520	18								1.49	+ 1.12	0.60	0	4					Irion & Craig.
Pinto.....	Apache.....	5,600	6								0.53		0.43	0	3	21	9	0	sw.	Mrs. Celia F. Henning.
Prescott.....	Yavapai.....	5,320	45	67.4	0.0	95	5	38	18	47	0.80	+ 0.54	0.70	0	2	27	2	1		John W. Flinn, W. D.
Quartzsite.....	Yuma.....	800	5	86.8		115	4	58	1	49	0.67		0.43	0	2	22	7	1	sw.	W. E. Scott.
Redrock.....	Pinal.....	1,864	4																	W. J. Crowell.
Roosevelt.....	Gila.....	2,175	7	80.8		107	4†	64	1	38	0.02		0.02	0	1	13	17	0	w.	U. S. Reclamation Service.
Sacaton.....	Pinal.....	1,280	5	85.5		112	4†	54	18	48	0.98		0.94	0	2					E. W. Hudson.
St. Johns.....	Apache.....	5,660	7																	A. Shreeve.
St. Michaels.....	do.....	6,950	24	68.4	- 1.2	89	3†	31	18	52	0.96	+ 0.28	0.34	0	5	12	13	5	sw.	Rev. A. Weber, O. F. M.
Salome.....	Yuma.....	1,875	5	81.6		108	5	54	12†	46	0.49		0.49	0	1	18	9	3	sw.	Mrs. M. B. Swartz.
San Carlos.....	Gila.....	2,456	30																	Miss M. A. Bingham.
San Simon.....	Cochise.....	3,609	27																	Agent So. Pac. Ry.
Seligman.....	Yavapai.....	5,219	7	66.6		94	4	39	10	47	0.07		0.06	0	2	19	0	11	sw.	Librarian A. T. & S. F. Ry.
Sentinel.....	Maricopa.....	685	14	89.2	- 0.3	115	6	64	1	43	0.14	+ 0.14	0.14	0	1	30	0	0	sw.	Agent So. Pac. Ry.
Silverbell.....	Pima.....	2,650	7	86.3		105	3	64	29†	39	0.90		0.50	0	2	26	0	4	s.	Imperial Copper Co.
Snowflake.....	Navajo.....	5,644	6	64.8		94	7†	31	18	57	0.68		0.32	0	4	8	13	9	sw.	William J. Flake.
Springerville.....	Apache.....	6,892	2	61.4		87	4	25	18	54	1.03		0.32	0	5	18	6	6	sw.	U. S. Forest Service.
Supai.....	Coconino.....	3,200	4	76.4		106	3	48	17	49	0.32		0.20	0	3	19	7	4		Laura B. Symons.
Tempe.....	Maricopa.....	1,165	8	85.3		115	5	58	10†	49	0.12		0.07	0	2	19	9	2	sw.	F. H. Simmons.
Thatcher.....	Graham.....	2,800	9	81.2		111	5	55	10†	55	0.38		0.31	0	3					Prof. J. H. Larson.
Tombstone.....	Cochise.....	4,550	16	78.7	+ 1.5	106	4	56	10†	41	0.58	+ 0.17	0.24	0	5	15	15	0		F. N. Wolcott.
Truxton.....	Mohave.....	3,997	3																	G. A. Dennis.
Tuba.....	Coconino.....	4,500	11	70.3	- 0.9	97	4	45	1†	43	0.15	- 0.10	0.08	0	3				sw.	H. P. Marble.
Tucson.....	Pima.....	2,390	31	83.0	+ 1.1	108	5†	53	2	51	0.61	+ 0.44	0.55	0	2	10	13	7	nw.	University of Arizona.
Tucson (1).....	do.....	2,380	4	81.0		111	5	55		55	0.23		0.16	0	2	12	14	4		J. M. Robe.
Tucson (2).....	do.....	2,526	1	81.6		109	5	53	10	47	0.65		0.46	0	4	15	15	0	w.	U. S. Coast and Geod. Sur.
Vail.....	do.....	3,421	13	84.8	+ 3.5	104	3	58	1	35	0.00	- 0.08	0.00	0	0	30	0	0		Agent So. Pac. Ry.
Walnut Grove.....	Yavapai.....	3,649	21								0.77	+ 0.74	0.35	0	4					J. O. Carter.
Wickenburg.....	Maricopa.....	2,072	13	83.9	+ 5.5	110	6	50	29	53	0.02	0.00	0.02	0	1	13	13	4	sw.	Agent S. F. P. & P. Ry.
Willcox.....	Cochise.....	4,164	30	75.6	- 3.2	103	5†	46	10	46	0.50	+ 0.26	0.30	0	2	24	1	5	s.	Agent So. Pac. Ry.
Williams.....	Coconino.....	6,750	12	61.4	- 1.9	89	3	33	9	49	0.98	+ 0.86	0.30	0	4	19	11	0		E. J. Nordyke.
Winslow.....	Navajo.....	4,853	4																	John F. Bauer.
Yarnell.....	Yavapai.....	4,700	13								0.63	+ 0.46	0.30	0	3	13	9	8	s.	E. L. Bartholomew.
Yuma.....	Yuma.....	141	31	86.0	+ 1.3	115	5	59	23	45	0.62	+ 0.62	0.62	0	1	29	0	1	w.	U. S. Weather Bureau.
Yuma (1).....	do.....	150	5																	E. L. Crane.
Nevada.																				
Caliente.....	Lincoln.....	4,407	2	66.9		100	4	38	17	56	0.10		0.10	0	1	20	8	2	se.	Salt Lake route.
Logan.....	Clark.....	1,355	5	79.8		112	3	51	23	56	0.94		0.94	0	1	26	4	0	s.	O. W. Jarvis.

a, b, c, etc., indicate respectively 1, 2, 3, etc., days missing from the record.
 ** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
 † Also on other dates.
 T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—Daily precipitation for June, 1912. District No. 9—Continued.

Stations.	Watershed.	Day of month.																														Total.				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					
<i>Arizona—Contd.</i>																																				
Mohawk Summit	Gila																																		0.00	
Naco	San Pedro							.08	.04													.01	.08	.04								.24		0.49		
Natural Bridge	Verde				T.			T.																	.30						.13			0.43		
Oracle	San Pedro																																			
Osborn	do.					T.																.19	.05	.24										.48		
Paradise	Desert							.18																	T.		T.	.18	.09						.45	
Parker	Colorado							T.																											.50	
Payson	Verde																																			
Phoenix	Salt						T.	.01															T.		T.										.01	
Phoenix (1)	do.						T.	.04															T.		T.										.04	
Phoenix (2)	do.																																			.00
Pinal Ranch	Gila																						T.	.60	.53	.08								.28	1.49	
Pinto	L. Colorado							T.															.43	.03	T.							.07	T.	.53		
Prescott	Hassayampa																																.10	.70	T.	.80
Quartzsite	Colorado																															.24	.43		.67	
Redrock	Santa Cruz																																			
Roosevelt	Salt																							.02												.02
Sacaton	Gila																						.94			.04										.02
St. Johns	L. Colorado																																			
St. Michaels	do.				T.	T.	T.	.05																T.	T.		.14	.18		.25	.34	T.		.96		
Salome	Colorado																																.49		.49	
San Carlos	Gila																																			
San Simon	do.																																			
Seligman	Verde																																			
Sentinel	Gila							.14																												.07
Silverbell	Santa Cruz																																			.14
Snowflake	L. Colorado																																			.14
Springerville	do.																																			.14
Supai	Colorado						T.		.15	.30																										.12
Tempe	Salt								.20	.02																										.12
Thatcher	Gila																																			.12
Tombstone	San Pedro								.15	.05																										.12
Truxton	Colorado																																			.12
Tuba	L. Colorado									.08																										.12
Tucson	Santa Cruz							T.	.06																											.12
Tucson (1)	do.																																			.12
Tucson (2)	do.																																			.12
Vail	do.							.05	.11																											.12
Walnut Grove	Hassayampa																																			.12
Wickenburg	do.																																			.12
Willcox	Desert																																			.12
Williams	Colorado								.20																											.12
Winslow	L. Colorado								.20																											.12
Yarnell	Hassayampa																																			.12
Yuma	Colorado																																			.12
Yuma (1)	do.																																			.12
<i>Nevada.</i>																																				
Caliente	Colorado																																			.10
Logan	do.							T.																												.94

* Precipitation included in that of the next measurement.
 † Separate dates of falls not recorded.
 ‡ Precipitation for the 24 hours ending on the morning when it is measured.
 T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—Maximum and minimum temperatures for June, 1912. District No. 9, Colorado Valley.

Date.	Wyoming.				Colorado.										Utah.										New Mexico.			
	Daniel.		Green River.		Durango.		Grand Junction.		Gunnison.		Meeker.		Steamboat Springs.		Emery.		Fort Duchesne.		Hite.		Moab.		St. George.		Bloomfield.		Fort Bayard.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	70	30	74	35	79	38	80	50	.....	72	33	68	29	75	36	83	40	94	55	89	44	94	52	86	37	82	51
2.....	71	31	81	38	83	40	87	52	.....	80	34	78	30	80	35	89	37	96	55	96	45	99	47	89	37	84	53
3.....	68	28	79	41	87	43	92	56	.....	80	35	76	32	81	37	90	40	100	59	99	49	101	48	92	41	92	54
4.....	71	31	81	37	87	45	89	50	.....	80	31	75	29	85	47	89	41	100	63	98	48	103	52	95	43	90	59
5.....	75	30	85	36	82	46	91	60	.....	81	35	80	29	82	40	90	38	101	59	100	51	102	56	96	47	90	61
6.....	73	30	82	47	84	47	94	60	.....	81	43	80	33	77	34	85	50	100	63	101	52	96	63	93	60	88	62
7.....	76	43	80	50	83	50	77	60	.....	74	48	72	39	85	37	85	52	90	70	83	52	97	71	85	61	82	62
8.....	71	45	77	49	75	47	77	57	.....	72	50	69	48	83	51	83	51	94	62	89	52	91	62	82	52	83	55
9.....	69	42	74	48	77	43	85	58	.....	75	44	71	39	85	39	78	52	92	67	89	51	86	50	80	56	83	58
10.....	71	40	78	40	77	37	84	50	.....	71	35	73	33	86	44	81	35	91	58	91	52	89	54	86	40	82	51
11.....	68	39	81	40	72	43	78	55	.....	73	37	75	31	80	41	84	43	93	50	93	65	92	52	82	49	80	56
12.....	70	42	80	42	77	39	86	55	.....	73	38	76	32	81	42	83	45	92	63	92	55	90	53	84	47	81	52
13.....	55	40	66	40	75	41	76	60	.....	66	44	63	33	79	45	77	48	92	69	86	59	90	50	82	47	80	53
14.....	47	32	62	39	78	42	82	59	.....	66	39	60	38	81	41	78	40	94	63	89	52	90	50	85	45	82	51
15.....	75	36	87	31	75	45	70	50	.....	62	38	56	30	87	40	67	45	85	65	86	59	84	62	83	54	83	54
16.....	50	27	57	25	70	39	68	43	.....	58	33	58	32	61	31	63	28	77	52	74	40	81	49	77	35	83	55
17.....	65	27	64	34	66	42	66	46	.....	60	34	64	30	62	33	69	31	81	56	76	39	85	52	71	50	83	58
18.....	70	28	72	31	72	36	77	46	.....	66	28	63	25	77	30	75	40	88	53	82	43	83	54	79	38	80	49
19.....	71	27	79	34	75	44	83	52	.....	70	30	71	25	81	37	82	35	91	61	87	46	97	57	83	44	78	50
20.....	75	32	86	36	79	39	86	53	.....	77	30	78	30	82	42	90	40	97	56	93	45	97	57	88	53	81	57
21.....	73	36	85	49	81	45	90	61	.....	81	40	74	23	81	46	90	48	96	63	94	52	93	62	90	50	82	53
22.....	71	35	82	49	73	50	80	65	.....	80	44	78	37	85	46	78	55	91	70	90	87	91	63	84	56	81	54
23.....	75	38	85	50	76	46	83	60	.....	75	40	77	39	81	51	87	53	94	69	91	56	92	51	80	53	82	52
24.....	80	40	90	49	78	45	87	60	.....	76	41	77	35	82	50	90	53	93	66	91	55	98	63	88	52	81	59
25.....	76	41	87	50	74	48	87	64	.....	80	44	76	43	83	51	91	50	95	65	95	58	98	51	88	54	82	52
26.....	78	40	86	44	77	47	88	62	.....	77	42	76	35	82	50	91	57	99	64	97	58	99	57	90	52	84	53
27.....	80	41	85	46	82	46	87	60	.....	76	41	77	37	81	45	85	49	100	67	97	56	97	60	89	56	86	53
28.....	81	43	85	46	80	50	84	63	.....	79	40	78	35	82	49	83	47	98	74	91	61	95	62	83	58	81	56
29.....	75	40	81	53	76	55	83	63	.....	75	47	74	41	85	51	83	53	98	71	91	64	84	59	84	55	80	51
30.....	67	37	.....	55	77	48	85	61	.....	75	50	73	41	81	50	84	55	91	68	89	61	88	58	85	52	84	51
Mns.....	70.2	35.4	77.8 ^a	42.0	76.9	44.2	82.8	56.4	.....	73.7	39.6	71.7	34.0	79.4	41.8	82.8	45.0	93.4	62.8	90.6	52.9	92.7	56.0	85.3	49.2	83.0	54.5

Date.	Arizona.																				Logan, Nev.		
	Bisbee.		Flagstaff.		Fort Apache.		Grand Canyon.		Parker.		Phoenix.		Prescott.		St. Michaels.		Tucson.		Yuma.				
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.			
1.....	86	57	77	32	.....	42	79	43	108	65	102	66	87	42	82	37	100	58	108	64	101	62	
2.....	89	60	82	36	.....	43	81	42	110	65	105	66	90	46	88	40	104	53	110	66	104	61	
3.....	91	61	84	40	.....	48	80	45	112	67	109	68	93	49	89	37	105	61	113	68	112	56	
4.....	92	68	83	43	.....	52	81	43	113	66	110	73	91	50	89	43	107	64	113	70	107	56	
5.....	92	64	85	40	.....	48	85	42	113	72	111	75	95	51	88	44	108	66	115	74	108	67	
6.....	92	64	80	45	.....	96	48	83	40	112	82	100	80	89	54	87	45	108	74	113	79	104	67
7.....	87	64	78	51	.....	86	63	82	43	108	80	104	79	88	60	89	55	104	84	108	79	106	65
8.....	88	57	74	46	.....	86	50	73	39	103	67	102	77	87	49	80	45	102	75	102	67	98	62
9.....	85	43	69	46	.....	87	50	80	44	100	70	96	67	86	45	78	47	101	60	100	67	94	58
10.....	87	53	70	32	.....	84	44	76	40	101	70	94	66	80	41	78	38	96	55	98	67	96	56
11.....	83	57	74	34	.....	84	43	78	38	100	70	98	65	81	43	77	40	96	58	100	65	98	61
12.....	82	58	72	36	.....	88	47	79	39	100	65	95	67	83	47	74	37	95	58	101	62	97	59
13.....	82	61	71	49	.....	81	53	78	38	98	64	96	67	83	53	78	54	95	64	98	70	97	60
14.....	87	68	72	42	.....	84	46	76	40	101	68	98	68	84	50	81	54	98	61	100	67	98	61
15.....	87	62	74	44	.....	85	47	78	38	101	68	97	68	80	53	80	53	99	65	100	66	98	64
16.....	85	61	71	35	.....	90	45	78	38	98	65	95	70	80	46	79	41	97	63	100	67	88	58
17.....	84	60	67	29	.....	84	48	76	36	102	73	97	68	81	48	74	42	94	63	100	70	91	64
18.....	86	59	73	42	.....	86	39	78	38	103	74	101	64	85	38	79	31	100	60	105	65	98	57
19.....	85	58	79	35	.....	88	49	78	36	104	72	102	67	87	43	82	40	101	68	106	65	104	58
20.....	82	60	77	36	.....	89	53	80	38	105	60	101	71	86	52	83	44	100	66	106	69	104	58
21.....	80	59	74	43	.....	87	54	78	38	101	72	100	76	83	53	82	52	98	73	103	76	98	57
22.....	78	57	66	46	.....	87	57	78	38	95	71	101	73	83	52	76	54	97	68	96	68	92	62
23.....	84	58	74	40	.....	85	51	80	38	100	71	100	70	81	51	81	45	100	70	93	59	92	51
24.....	87	59	75	53	.....	88	58	80	36	101	71	101	72	87	50	81	48	100	67	102	63	99	60
25.....	86	60	80	40	.....	89	55	78	36	103	72	105	73	84	54	82	46	103	68	107	66	103	61
26.....	88	61	80	44	.....	90	55	76	38	108	71	105	77	88	53	84	47	104	72	111	74	105	61
27.....	87	61	79	44	.....	90	56	76	36	108	72	103	78	91	59	82	47	100	77	107	75	104	65
28.....	82	60	73	47	.....	87	53	78	38	105	75	102	78	85	57	83	50	97	72	100	78	103	63
29.....	82	60	74	46	.....	89	54	80	34	100	72	97	74	78	49	82	52	97	69	78	71	83	61

TABLE 1.—Climatological data for June, 1912. District No. 10, Great Basin.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<i>Wyoming.</i>																				
Border	Uinta	6,085	10	56.8	+ 1.5	84	28	28	15	48	1.54	+ 0.48	0.65	0	6	12	12	6	w.	S. W. Condron.
Cokeville	do	6,204	2	56.64	.....	90	25	26	15†	51d	1.18	.....	0.35	0	7	27	1	2	w.	E. J. Tuckett.
Evanston	do	6,860	16	55.0	+ 0.7	81	6	22	25	54	1.21	+ 0.24	0.39	0	7	12	14	4	sw.	Frank Tucker.
<i>Idaho.</i>																				
Geneva	Bear Lake	6,171	4	.....	.....	.....	.....	.....	.....	.....	1.07	.....	0.46	0	6	23	4	3	.....	F. W. Boehme.
Grace	Bannock	5,400	5	63.4	.....	90	24	32	14	47	1.26	.....	0.66	0	3	14	5	11	n.	Donald R. Shirk.
Paris	Bear Lake	5,946	17	55.8	+ 0.1	83	29	28	14†	46	0.95	+ 0.24	0.30	0	5	19	5	6	sw.	John Norton.
Weston	Oneida	4,460	14	61.4	+ 0.8	88	24†	30	16	47	0.81	- 0.11	0.57	0	5	17	6	7	sw.	Wm. T. Chatterton.
<i>Utah.</i>																				
Alpine	Utah	4,900	13	.....	.....	.....	.....	.....	.....	.....	0.44	- 0.27	0.44	0	1	17	13	0	.....	T. F. Carlisle.
Beaver	Beaver	6,000	8	62.5	.....	90	3	30	15	47	T.	.....	T.	0	0	9	12	9	s.	E. D. Bacon.
Black Rock	Millard	4,872	8	62.8	.....	92	5	30	17	55	T.	.....	T.	0	0	17	11	2	.....	W. D. Livingston.
Burrville	Sevier	.....	1	57.2	.....	93	7	28	15	53	0.20	.....	0.20	0	1	.....	.....	.....	.....	F. R. Curtis.
Castle Rock	Summit	6,244	7	.....	.....	.....	.....	.....	.....	.....	1.87	.....	0.83	0	17	7	19	4	w.	David Moore.
Cedar City	Iron	5,750	7	66.4	.....	89	4	33	16	36	0.13	.....	0.04	0	5	14	9	7	sw.	Parley Dalley.
Center	Tooele	.....	.....	64.6	.....	92	6†	30	16	49	0.28	.....	0.15	0	3	16	12	2	s.	L. C. Peterson.
Clarkston	Cache	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.88	.....	0.41	0	5	13	8	9	.....	W. J. Griffiths.
Corinne	Boxelder	4,240	42	66.5	- 4.0	92	9†	33	17	46	0.84	+ 0.27	0.38	0	3	12	7	11	.....	A. C. Murphy.
Deseret	Millard	4,541	17	66.2	+ 1.1	92	5	32	16	49	0.14	- 0.23	0.07	0	3	14	3	13	s.	S. W. Western.
Erekson	Tooele	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.17	.....	0.09	0	4	.....	.....	.....	.....	N. W. Erekson.
Enterprise	Washington	4,270	6	.....	.....	.....	.....	.....	.....	.....	0.20	.....	0.20	0	1	10	7	13	s.	John Day.
Fairfield	Utah	4,866	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	W. Harden Ashby.
Farmington	Davis	4,267	11	66.8	+ 2.5	92	25†	35	16	47	0.80	- 0.06	0.80	0	1	17	12	1	s.	Charles Boylin.
Fillmore	Millard	5,100	20	69.4	+ 1.7	97	2†	33	16	46	0.20	- 0.32	0.07	0	4	.....	.....	.....	.....	J. J. Starlev.
Frisco	Beaver	7,318	16	64.8	- 3.5	91	5	34	16	41	0.10	- 0.22	0.10	0	1	.....	.....	.....	.....	Essen Nordberg.
Garrison	Millard	.....	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	E. M. Smith.
Government Creek	Tooele	5,277	11	63.8	+ 0.7	91	26	28	16	47	0.21	- 0.41	0.13	0	2	10	3	17	s.	Walter James.
Granger	Salt Lake	.....	.....	65.0	.....	89	25†	33	16	40	0.88	.....	0.44	0	4	.....	.....	.....	.....	Geo. E. Greene.
Grantsville	Tooele	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.74	.....	0.35	0	4	16	7	7	s.	J. C. Woodmause.
Grouse Creek	Boxelder	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.46	.....	0.82	0	7	7	12	11	sw.	Philip Paskett.
Heber	Wasatch	5,606	19	60.8	+ 1.6	88	6	27	16	52	0.66	+ 0.13	0.20	0	5	18	10	2	s.	John Crook.
Henefer	Summit	5,301	12	59.6	+ 1.3	86	5†	27	16	54	1.53	+ 0.84	0.43	0	7	11	16	3	w.	William Brewer.
Hooper	Weber	4,436	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	1	.....	.....	.....	.....	T. M. Jones, Jr.
Ibapah (near)	Tooele	7,500	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.89	0	.....	.....	.....	.....	.....	J. S. Lawton.
Ibex	Millard	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	John J. Watson.
International	Tooele	5,370	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	I. S. R. Co.
Iosepa	do	.....	.....	68.9	.....	96	26	34	16	47	0.81	.....	0.35	0	4	13	6	11	s.	Geo. K. Hubbell.
Joy	Juab	.....	.....	67.2	.....	97	4	39	16†	42	0.00	.....	0.00	0	0	.....	.....	.....	.....	A. M. Laird.
Junction	Piute	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.16	.....	0.16	0	1	20	10	0	s.	Joseph Jensen.
Kanosh	Millard	5,250	2	.....	.....	.....	.....	.....	.....	.....	0.10	.....	0.05	0	3	.....	.....	.....	.....	Geo. Crane.
Kelton	Boxelder	4,230	32	64.6	- 4.7	92	27	31	16	45	0.10	- 0.27	0.10	0	1	9	19	2	se.	F. W. Klock.
Lemay	do	.....	.....	78.2	.....	93	24	55	16	24	0.25	.....	0.25	0	1	14	14	2	.....	Agent S. P. Co.
Levan	Juab	5,010	23	64.4	+ 1.6	89	27	31	16	40	0.18	- 0.37	0.15	0	3	15	9	6	sw.	William Brown.
Logan	Cache	4,507	21	64.6	+ 1.4	87	20	33	16	35	0.91	+ 0.12	0.63	0	5	.....	.....	.....	.....	Utah Experiment Station.
Low	Tooele	.....	.....	72.0	.....	100	27	36	17	45	0.07	.....	0.04	0	3	12	17	1	n.	Agent W. P. Ry. Co.
Lund	Boxelder	4,504	5	58.3	.....	89	5	30	22†	46	T.	.....	T.	0	0	17	8	5	.....	R. G. Crocker.
Manti	Iron	5,086	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	Job F. Hall.
Maple Creek	Sanpete	5,575	17	61.4	- 3.3	85	27	30	17	42	0.55	+ 0.18	0.16	0	5	7	1	22	.....	J. M. Anderson.
Marion	Utah	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.81	.....	0.58	0	3	15	13	2	.....	Lewis W. Gillilan.
Marysvale	Summit	6,400	7	.....	.....	.....	.....	.....	.....	.....	0.90	.....	0.28	0	7	6	3	21	s.	Jas. Woolstenhulme.
Meadowville	Piute	6,076	12	61.8	+ 2.3	92	4	32	16	54	0.16	- 0.14	0.07	0	5	8	11	11	s.	John W. Henry.
Midlake	Rich	6,200	11	59.3	+ 3.3	85	20	28	15	49	0.40	- 0.46	0.20	0	3	20	6	4	w.	J. S. Moffat.
Midvale	Boxelder	.....	.....	70.4	.....	84	4	41	15	19	0.40	.....	0.20	0	3	10	7	13	e.	Agent S. P. Co.
Millford	Salt Lake	.....	.....	66.4	.....	95	26†	33	15	51	0.90	.....	0.53	0	5	11	16	3	s.	M. J. Joy.
Mills	Beaver	4,962	4	67.2	.....	95	3	40	17†	45	T.	.....	T.	0	0	22	0	8	s.	Agent Salt Lake route.
Millville	Juab	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.11	.....	0.07	0	4	.....	.....	.....	.....	Geo. McCune.
Minersville	Cache	4,848	17	.....	.....	.....	.....	.....	.....	.....	1.15	+ 0.33	0.71	0	6	10	20	0	s.	Fred Yeates.
Modena	Beaver	5,070	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	George Roberts, sr.
Morgan	Iron	5,479	11	62.6	- 0.6	90	5	34	16	45	0.05	- 0.35	0.03	0	2	14	11	5	sw.	U. S. Weather Bureau.
Moron	Morgan	5,068	7	63.0k	.....	89k	27†	30k	16	44k	0.06	.....	0.04	0	2	.....	.....	.....	.....	A. O. Kingston.
Mosida	Sanpete	5,519	4	63.0	.....	86	0	32	16	36	0.87	.....	0.35	0	5	8	8	14	sw.	B. F. Eliason.
Mount Nebo	Utah	.....	.....	70.3	.....	96	6	38	16	45	0.17	.....	0.09	0	4	24	6	0	.....	R. P. Curtis.
Nephi (near)	do	4,650	10	69.6	.....	96	7	32	16	44	0.09	.....	0.06	0	2	17	12	1	s.	D. C. Walkey.
Newcastle	Juab	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	S. Boswell.
Oak City	Iron	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	T. W. Jones.
Ogden	Millard	4,900	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	Peter Nielson.
Panguitch	Weber	4,310	41	65.2	- 6.2	86	29†	30	16	35	0.31	- 0.36	0.17	0	2	12	16	2	w.	A. Van De Graff.
Park City	Garfield	.....	.....	58.4	.....	88	3	30	17	52	T.	.....	T.	0	0	13	11	6	.....	John N. Henrie.
Park Valley	Summit	7,800	7	59.0	.....	87	17	31	21	49	0.24	.....	0.06	0	9	17	7	6	.....	Gertrude Evans.
Parowan	Boxelder	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.84	.....	0.24	0						

TABLE 1.—Climatological data for June, 1912. District No. 10—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.					Sky.			Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.			Number of cloudy days.
<i>Utah—Continued.</i>																				
Wendover.....	Tooele.....	.....	1	69.8	.....	96	19†	40	15	35	0.09	.....	0.09	0	1	18	12	0	se.	J. S. Cooper.
Whisky Creek.....	Millard.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	0	0	.....	.....	.....	George Stevens.
Winder.....	Garfield.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	2	.....	.....	.....	.....	C. H. Mangum.
Woodruff.....	Rich.....	6,500	10	51.0 ^a	.....	81 ^k	28	21 ^k	13†	60 ^k	0.64	.....	0.25	0	4	4	7	8	.....	A. L. Eastman.
<i>Oregon.</i>																				
Burns.....	Harney.....	4,157	20	58.0	+ 0.5	89	24	29	14	43	1.17	+ 0.46	0.33	0	5	17	10	3	sw.	J. C. Welcome, jr.
Cliff.....	Lake.....	4,300	4	55.4	.....	89	5	23	15	51	1.21	.....	0.54	0	4	12	5	13	nw.	John C. Green.
Paisley.....	do.....	4,500	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. C. Woodward.
Silver Lake.....	do.....	4,700	14	56.8	+ 1.2	89	5	27	15	52	1.97	+ 0.98	0.64	0	9	15	12	3	n.	L. W. Charles.
<i>California.</i>																				
Tahoe.....	Placer.....	6,240	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	R. M. Watson.
Truckee.....	Nevada.....	5,819	41	54.3	- 3.1	88	3	30	15	46	T.	- 0.37	T.	T.	0	6	11	13	sw.	Southern Pacific Co.
<i>Nevada.</i>																				
Austin.....	Lander.....	6,594	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. O. Booe.
Battle Mountain.....	do.....	4,843	41	64.4 ^a	- 2.4	96 ^a	19	34 ^a	4†	52 ^a	.....	.....	.....	0	.....	18	7	5	w.	Southern Pacific Co.
Beowawe.....	do.....	4,905	41	62.2	- 5.8	93	7†	27	6	56	.....	.....	.....	0	.....	20	0	10	w.	Do.
Carlin.....	Elko.....	5,232	41	61.6	- 1.1	96	19	26	15	58	.....	.....	.....	0	.....	.....	.....	.....	.....	Do.
Carson Dam.....	Churchill.....	4,032	5	65.2	.....	93	4†	39	23	43	0.56	.....	0.56	0	1	19	8	3	w.	U. S. Reclamation Service.
Cherry Creek.....	White Pine.....	6,450	4	62.8	.....	90	6	27	16	42	0.04	.....	0.02	0	3	17	9	4	w.	J. H. Leishman.
Clover Valley.....	Elko.....	6,000	11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0	.....	.....	.....	.....	.....	I. F. Wiseman.
Columbia.....	Esmeralda.....	5,750	5	66.0	.....	94	4	33	16	43	0.00	.....	0.00	0	0	22	6	2	se.	A. Booth.
Dry Farm.....	Elko.....	.....	0	60.6	.....	90	6	28	15	51	0.75	.....	0.38	0	4	.....	.....	.....	.....	Walfrid Sohlman.
Elko.....	do.....	5,432	41	61.0	- 2.1	88	4†	29	16	52	1.02	+ 0.50	0.56	0	6	16	3	11	w.	E. J. Clark.
Ely.....	White Pine.....	6,421	21	59.6 ^b	- 0.7	87 ^b	3	27 ^b	16	51 ^b	0.22	- 0.18	0.12	0	3	19	1	10	sw.	R. F. Mathias.
Eureka.....	Eureka.....	6,500	9	61.9	.....	87	2†	23	16	45	0.69	.....	0.33	0	5	13	6	11	s.	Clay Simms.
Fallon.....	Churchill.....	3,965	7	65.5	.....	96	4†	36	23	49	0.22	.....	0.14	0	4	22	4	4	s.	U. S. Experiment Station.
Fernley.....	Lyon.....	4,200	39	64.5	- 2.3	96	3†	34	16	52	0.26	+ 0.07	0.26	0	1	12	17	1	w.	Mrs. G. A. Steele.
Gardnerville.....	Douglas.....	4,830	12	59.2 ^c	- 2.4	96 ^c	3	32 ^c	21	43	0.30	+ 0.08	0.17	0	2	21	1	8	w.	W. M. Maule.
Geysers.....	Lincoln.....	.....	8	.....	.....	95	17	.....	.....	.....	.....	.....	0.20	0	1	13	16	1	s.	Mrs. J. F. Wambolt.
Golconda.....	Humboldt.....	4,697	33	66.0	- 1.3	93	26	33	15	48	0.27	- 0.24	0.12	0	3	4	11	15	w.	Southern Pacific Co.
Halleck.....	Elko.....	5,631	19	60.2	- 1.5	91	26	26	15	50	0.47	- 0.08	0.22	0	4	13	16	1	w.	Do.
Hawthorne.....	Mineral.....	4,659	18	68.1	+ 0.4	98	19	38	16†	44	0.43	+ 0.18	0.28	0	3	22	5	3	sw.	G. B. Stannard.
Jean.....	Clark.....	2,074	4	73.4	.....	104	4	43	25	57	T.	.....	T.	0	0	18	12	0	nw.	Salt Lake Route.
Lahontan.....	Churchill.....	.....	0	68.7	.....	98	1†	39	22	40	0.28	.....	0.15	0	4	23	5	2	w.	U. S. Reclamation Service.
Lewers' Ranch.....	Washoe.....	5,500	24	59.0	- 1.1	94	4	31	23	50	0.50	+ 0.09	0.50	0	1	16	14	0	.....	Ross Lewers.
Lovelocks.....	Humboldt.....	3,977	18	64.6	- 3.2	97	4†	36	16	52	0.30	+ 0.09	0.10	0	5	16	13	1	s.	A. P. Tilford.
Millett.....	Nye.....	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Fred J. Jones.
Mina.....	Mineral.....	4,600	5	68.0	.....	98	3†	36	23	45	0.00	.....	0.00	0	0	29	0	1	ne.	Southern Pacific Co.
Potts.....	Nye.....	6,990	19	57.2	- 7.3	89	19	24	16	53	0.20	- 0.06	0.15	0	2	10	2	18	s.	Miss Mamie Potts.
Quinn River Ranch.....	Humboldt.....	8,450	10	63.2 ^b	+ 5.2	94 ^b	6	27 ^b	16	54 ^b	0.07	- 0.37	0.07	0	1	10	3	17	sw.	F. M. Payne.
Rebel Creek.....	do.....	.....	0	62.4	.....	91	5†	32	15	49	0.84	.....	0.34	0	7	12	8	10	sw.	E. J. Hvatt.
Reno.....	Washoe.....	4,532	41	61.8	+ 0.8	93	4	37	23	42	0.47	+ 0.23	0.24	0	4	19	7	4	w.	U. S. Weather Bureau.
Soda Lake.....	Churchill.....	4,534	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Reclamation Service.
Tecoma.....	Elko.....	4,812	34	59.4	- 4.4	98	27	30	3	58	0.38	- 0.16	0.25	0	4	11	9	10	se.	Southern Pacific Co.
Tomopah.....	Nye.....	6,090	7	63.8	.....	89	3	34	23	29	0.02	.....	0.01	0	2	18	10	2	se.	U. S. Weather Bureau.
Wells.....	Elko.....	5,631	40	58.4	- 4.2	.....	.....	.....	.....	.....	0.75	+ 0.28	0.75	0	1	28	0	2	.....	Southern Pacific Co.
Winnemucca.....	Humboldt.....	4,432	33	64.4	+ 1.1	94	5	33	15	45	1.14	+ 0.50	0.77	0	6	14	10	6	ne.	U. S. Weather Bureau.

^a, ^b, ^c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.
 ** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
 † Also on other dates.
 T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—Daily precipitation for June, 1912. District No. 10—Continued.

Stations.	Watershed.	Day of month.																													Total.
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		30
<i>Utah—Continued.</i>																															
Whisky Creek	Desert																														
Winder	Sovier Lake																														
Woodruff	G. S. Lake												.25				.02							.10		.12		.25			
<i>Oregon.</i>																															
Ana River	SE. drainage							.01	.09				.03	.05																	
Bear Valley	do																														
Burns	do																														
Burns Mill	do																														
Christmas Lake	do																														
Cliff	do																														
Diamonds	do																														
Embodiy	do																														
Fort Rock	do																														
Paisley	do																														
Seneca	do																														
Silver Lake	do																														
Valley Falls	do																														
<i>California.</i>																															
Bijou	Truckee																														
Boca	do																														
Bridgeport	East Walker																														
Deer Park	Truckee																														
Glen Alpine	do																														
Hobart Mills	do																														
Lundy	East Walker																														
Markleville	East Carson																														
Shields Ranch	East Walker																														
Silver Creek	East Carson																														
Tahoe	Truckee																														
Tallac	do																														
Truckee	do																														
Woodfords	West Carson																														
<i>Nevada.</i>																															
Arthur	Humboldt																														
Austin	Reese																														
Battle Mountain	Humboldt																														
Beowawe	do																														
Bishop	do																														
Carlin	do																														
Carson Dam	Carson																														
Cherry Creek	Humboldt																														
Clover Valley	do																														
Columbia	Desert																														
Dry Farm	Humboldt																														
Elko	do																														
Fly	do																														
Eureka	do																														
Fallon	Carson																														
Fernley	Truckee																														
Gardnerville	Carson																														
Geyser	Humboldt																														
Glenbrook	Truckee																														
Golconda	Humboldt																														
Halleck	do																														
Hawthorne	Desert																														
Jean	do																														
Labontan	Carson																														
Lewers Ranch	Truckee																														
Lovelocks	Humboldt																														
Massacre Lakes	Desert																														
Mill City	Humboldt																														
Millett	Reese																														
Mina	Desert																														
North Fork	Humboldt																														
Potts	Reese																														
Quinn River Ranch	Humboldt																														
Rebel Creek	do																														
Reno	Truckee																														
Skelton	Humboldt																														
Smith	West Walker																														
Soda Lake	Carson																														
Spooners Ranch	Truckee																														
Sweetwater	East Walker																														
Tecoma	Humboldt																														
Tonopah	Desert																														
Wells	Humboldt																														
Willow Point	Little Humboldt																														
Winnemucca	Humboldt																														

* Precipitation included in that of the next measurement.
 † Separate dates of falls not recorded.
 ‡ Precipitation for the 24 hours ending on the morning when it is measured.
 T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—Maximum and minimum temperatures at selected stations for June, 1912. District No. 10, Great Basin.

Date.	Wyoming.						Utah.																			
	Border.		Evanston.		Weston, Idaho.		Corinne.		Government Creek.		Joy.		Marysville.		Meadowville.		Modena.		Ogden.		Parowan.		Provo.		Salt Lake City.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	69	32	68	32	74	36	75	41	76	39	86	43	83	35	71	36	80	35	80	55	82	43	82	37	76	51
2.....	74	32	72	37	82	38	79	40	84	49	92	50	89	35	80	42	86	41	81	58	88	50	89	40	84	54
3.....	71	38	72	40	79	40	88	43	81	44	90	50	87	40	77	39	87	45	78	60	89	51	87	44	79	57
4.....	75	31	76	34	82	35	89	43	85	45	97	52	92	42	78	39	89	45	74	56	89	55	88	38	83	54
5.....	78	32	79	37	85	39	86	43	87	50	86	51	79	43	80	40	90	47	79	59	65	51	91	41	86	58
6.....	82	39	81	45	86	43	90	53	89	57	89	57	86	45	79	47	85	47	83	62	79	64	98	53	90	65
7.....	81	51	75	44	85	53	90	55	83	59	90	50	85	48	84	55	86	54	84	64	84	58	90	55	86	59
8.....	77	52	72	49	85	53	88	57	82	48	87	51	82	48	77	53	79	44	81	62	83	52	86	54	85	58
9.....	76	42	70	38	78	45	92	59	81	43	85	50	81	46	78	54	73	42	76	59	79	49	87	54	76	59
10.....	76	38	65	39	75	40	80	47	71	42	90	46	74	40	69	41	73	49	75	58	73	46	78	44	71	55
11.....	73	37	74	38	79	39	80	47	77	42	66	50	77	37	79	39	79	41	68	52	79	44	83	42	77	53
12.....	74	40	71	41	80	42	84	48	80	52	76	40	78	41	77	40	79	50	74	53	81	48	85	48	81	60
13.....	64	40	67	42	65	50	78	45	75	46	80	50	76	49	65	45	79	47	78	56	79	53	78	52	72	51
14.....	58	38	57	37	65	42	71	46	69	46	82	51	77	46	64	39	79	44	74	55	78	53	73	51	66	51
15.....	52	28	51	29	58	33	57	35	58	29	79	40	64	46	53	28	69	44	67	32	74	41	54	41	56	43
16.....	52	30	50	24	63	30	60	38	59	28	66	39	61	32	59	30	64	34	56	30	64	34	63	31	57	40
17.....	63	30	60	32	69	33	69	33	64	33	69	39	69	35	69	31	72	43	58	39	72	36	74	32	68	47
18.....	69	33	65	30	75	35	76	44	85	33	80	44	77	33	68	33	79	38	65	42	79	41	80	36	73	52
19.....	75	34	75	32	80	38	84	48	83	41	80	50	82	35	79	34	84	42	72	48	84	47	86	40	83	52
20.....	83	35	78	36	85	39	89	47	89	49	90	51	87	41	86	37	84	43	76	51	86	53	95	41	89	58
21.....	83	43	80	46	85	50	88	61	83	46	90	50	83	52	84	48	79	50	78	52	82	52	94	49	86	65
22.....	72	43	73	47	80	51	84	61	78	53	89	48	75	51	73	49	78	57	78	56	77	52	80	62	83	67
23.....	81	44	76	47	85	49	88	57	86	56	91	54	82	57	83	45	79	42	81	59	82	58	90	69	87	65
24.....	82	41	77	41	88	48	90	53	84	53	90	51	83	54	80	44	80	52	82	58	80	56	91	51	87	66
25.....	80	45	76	22	85	49	87	53	86	50	94	52	87	41	79	46	84	44	85	60	83	49	91	47	90	60
26.....	80	42	75	44	88	50	89	56	91	55	92	60	86	43	77	46	86	47	83	56	86	53	92	52	90	69
27.....	82	65	77	41	87	48	92	57	89	57	90	60	87	44	84	44	85	46	83	54	87	57	93	49	90	66
28.....	84	43	76	46	86	45	91	59	89	55	93	60	82	46	84	55	85	48	84	52	82	62	92	53	90	68
29.....	76	53	74	47	81	63	86	68	83	60	68	46	84	50	78	58	73	47	86	53	80	51	90	62	87	67
30.....	78	36	72	49	79	53	89	63	83	53	74	53	78	44	78	51	75	45	86	59	79	45	87	50	82	65
Mns.....	74.1	39.6	71.1	38.9	79.1	43.6	83.0	50.0	80.3	47.4	84.7	49.6	80.4	43.3	75.7	42.9	80.0	45.1	76.8	53.7	82.6	50.1	84.9	47.3	80.3	57.8

Date.	Nevada.																												
	Burns, Oreg.		Cherry Creek.		Elko.		Eureka.		Fallon.		Jean.		Lovelocks.		Mina.		Potts.		Quinn River ranch.		Reno.		Tecoma.		Tonopah.		Winnemucca.		
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.....	75	37	84	54	82	36	83	38	90	41	95	75	91	45	89	94	84	34	86	36	85	47	70	38	82	55	88	48	
2.....	79	39	85	44	87	38	87	45	93	51	101	44	95	48	92	53	87	38	89	45	89	51	78	40	86	62	90	45	
3.....	81	36	83	47	84	40	85	45	92	55	103	48	92	54	89	59	78	33	89	52	91	52	68	30	89	65	88	52	
4.....	80	40	85	46	88	36	87	44	96	50	104	55	97	58	98	56	88	40	93	40	93	54	80	42	88	64	93	50	
5.....	87	48	86	48	88	46	85	53	96	57	102	60	97	52	96	62	87	47	93	51	91	56	78	34	87	64	94	59	
6.....	87	50	90	51	88	46	87	50	94	53	102	58	97	52	92	61	85	40	94	55	89	52	74	43	85	63	91	56	
7.....	84	46	88	56	85	46	81	50	89	55	100	60	93	51	92	60	80	43	85	57	79	54	65	33	81	61	89	53	
8.....	76	35	84	44	81	43	78	48	86	52	92	52	79	51	87	56	77	37	79	54	73	49	78	44	75	63	78	51	
9.....	76	38	72	43	67	40	70	38	79	47	95	48	81	49	72	55	61	42	.....	.....	75	47	80	32	63	48	72	50
10.....	74	36	71	39	63	46	66	39	81	45	92	45	78	47	82	48	67	42	.....	.....	81	45	71	37	66	44	80	45
11.....	76	40	76	40	77	43	78	40	87	48	95	50	85	41	84	58	75	38	88	40	82	51	80	43	76	54	85	51	
12.....	82	42	80	45	74	52	75	41	86	61	93	57	77	54	80	55	70	40	79	53	66	54	78	39	69	50	74	51	
13.....	64	35	73	41	68	43	72	44	77	44	91	50	71	43	82	44	72	36	71	47	68	52	80	44	75	48	71	46	
14.....	64	29	68	42	67	45	67	37	75	45	90	51	69	41	77	52	65	34	65	43	70	46	80	43	67	44	66	43	
15.....	63	38	58	45	55	30	61	30	75	42	89	49	67	40	75	44	57	33	62	35	66	40	50	32	63	39	62	33	
16.....	67	38	60	27	64	29	63	23	72	37	87	48	75	36	72	38	64	24	70	27	70	37	55	37	68	39	70	35	
17.....	78	45	68	34	73	40	75	32	82	38	85	48	84	44	83	42	76	26	82	32	81	42	70	42	73	50	80	44	
18.....	69	44	75	41	78	42	79	44	88	42	94	49	90	48	89	46	81	33	89	55	87	47	80	40	80	57	86	48	
19.....	70	39	81	44	85	43	85	50	94	48	100	46	92	46	95	51	89	36	93	53	88	54	85	40	85	62	91	57	
20.....	74	42	89	47	87	49	85	61	85	48	98	53	77	45	93	48	81	49	85	55	74	44	84	39	81	54	88	46	
21.....	75	40	83	53	76	47	78	38	75	38	93	52	72	40	81	46	69	37	65	41	60	41	85	42	62	42	67	42	
22.....	79	39	83	50	75	53	71	67	67	45	89	47	71	38	67	44	68	49	75	45	48	29	78	41	68	35	73	47	
23.....	80	48	79	49	81	54	72	50	70	36	96	47	74	40	72	36	68	36	75	46	62	37	85	39	60	34	77	46	
24.....	89	46	83	49	85	43	78	58	86	43	96	49	90	38	83	51	77	40	87	33	80	39	88	47	72	46	88	44	
25.....	86	45	86	49	88	44	82	54	90	51	98	43	94	45	87	49	80	41	90	39	83	48	87	45	78	53	91	50	